

ABSTRACT
COMMUNICATION SYSTEM FOR DOWN HOLE USE

5 A communication system for down hole use and comprising a
drill collar (101) comprising a first portion (103) and a
second portion (105) separated from each other by an
electrically insulating material (67) and means (22, 63, 77,
81) for generating an electrical signal and for applying the
10 electrical signal to the drill collar (101) such that the
electrical signal is transmitted into a geological formation
being drilled, characterised in that the means for generating
the electrical signal comprises an alternator (22, 63, 77,
81) and means (2, 4, 10) responsive to an electrical output
15 of the alternator for regulating rotation of the alternator.